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SELF HELP FOR HARD OF HEARING PEOPLE, INC.  
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November 17, 1997

Mr. William F. Caton  
Secretary  
Federal Communications Commission  
1919 M Street, NW, Room 222  
Washington, DC 20554

**Re: Ex Parte Presentation**  
**WT Docket No. 97-153**  
Amendments to Part 90 of the Commission's Rules Concerning Private Land Mobile Radio Services.

Dear Mr. Caton:

On Friday, November 7, 1997, an ex parte meeting was held to discuss issues raised in the above referenced proceeding. The meeting was attended by the following persons:

Steve Weingarten, Wireless Telecommunications Bureau  
D'Wana Speight Terry, Wireless Telecommunications Bureau  
Roger Noel, Wireless Telecommunications Bureau  
Pam Gregory, FCC Disabilities Task Force  
Brenda Battat, Self Help for Hard of Hearing People (SHHH)

At the meeting SHHH raised issues which are outlined in more detail in the attached document. An original and two copies are being filed with your office for inclusion in the public record.

Sincerely,

Brenda Battat  
Deputy Executive Director

cc: Meryl Icove Esq.  
Ms. Pamela Gregory  
Mr. Steven Weingarten

D'Wana Speight Terry Esq.  
Mr. Roger Noel  
Peter Tannenwald Esq.

File of Correspondence 012  
11/18/97



**EX PARTE PRESENTATION  
WT Docket No. 97-153**

**AMENDMENTS TO PART 90 OF THE COMMISSION'S RULES CONCERNING  
PRIVATE LAND MOBILE RADIO SERVICES**

**INTRODUCTION**

Self Help for Hard of Hearing People, Inc. (SHHH) missed the release on August 25, 1997 of the FCC's Notice of Proposed Rule Making (NPRM) in the above referenced proceeding. Had we been aware of the NPRM's release we most certainly would have sent comments during the appropriate period.

The issue is of critical concern to our constituency, the 26 million people of all ages and all degrees of hearing loss who choose to use their residual hearing, to the extent possible, through hearing aids, cochlear implants, and other assistive listening devices.

**BACKGROUND**

SHHH is a national educational organization with a national office, seven state associations, and a network of 250 chapters and groups across the country.

SHHH supported Phonic Ear's original petition for rule making, WT Docket No. 95-56, which led to the adoption of regulations

permitting assistive listening devices to operate in the 216-217 MHz band. At that time we believed that creating interference-free channels offered a very promising alternative to the existing 72-76 MHz band which had been, and still continues to be, plagued by increasing, serious interference from high-powered users.

#### **CONSUMER NEED FOR ASSISTIVE LISTENING DEVICES**

Of the 42 million Americans with disabilities those forming the largest group are people with hearing loss. They number 28 million and, as a result of the aging of our society and noise, the group is predicted to grow substantially. In addition, the baby boomers, as demonstrated by President Clinton recently getting hearing aids, are getting to the age when they are starting to lose their hearing.

Although hearing aids help millions of people hear better there are certain situations where they perform less well and therefore hearing aid users need other assistive technology to 'stretch' their hearing aids. Such situations might be when the speaker is a long distance from the hearing aid user, as in a lecture or theater; where acoustics are poor, for example in houses of worship, or school classrooms; and when there is competing background noise, when at a crowded event or in a noisy transportation terminal.

Apart from the 6 million people who use hearing aids it is

estimated that 75% of those people who could benefit from hearing aids do not use them. This is true for a variety of reasons including, continued stigma in our society about hearing loss and its association with aging, the poor reputation that hearing aids have generally and their high cost, and because of difficulties adjusting to hearing aids, for instance in cases of poor manual dexterity, to name a few. These people who for whatever reason do not use hearing aids but have hearing loss also use and benefit tremendously from assistive listening devices, without hearing aids, in a variety of situations. Hence the numbers of users and potential users of FM systems is quite large.

By using an assistive device, either with a hearing aid or alone, people with varying degrees of hearing loss can hear better in many situations. Assistive listening devices allow both adults and children to remain independent and continue to function in the mainstream. Indeed assistive listening devices are an example of auxiliary aids and services which are mandated by the Americans with Disabilities Act of 1990 as a means of providing communication access in the workplace, schools, courtrooms, other state and local government facilities and public accommodations such as hotels, hospitals, theaters and cinemas.

Nationwide there are 320,00 churches. Although churches are not mandated to provide assistive devices by the ADA, thousands are being responsive to their congregations and installing systems.

Churches experience a very high usage of assistive listening devices due to the high numbers of senior congregants. (One in three of the population over 65 years of age has hearing loss.)

There are 27,000 theater screens in America. According to the National Association of Theater Owners (NATO) their members represent 18,000 of those screens, and most of them are complying with the ADA. There are 7,000 hospitals in the U.S. which have to provide communication access to both their patients and employees and assistive listening devices is one way to provide that access. SHHH has worked with over 500 hospitals to help them implement the ADA through the SHHH Hospital Program. In addition, with the renewed emphasis on mainstreaming of children with disabilities in the IDEA (Individuals with Disabilities Education Act) Reauthorization in process right now, hard of hearing children need and have a right to well functioning, interference-free assistive listening systems in their classrooms, which have notoriously poor acoustics, to hear the teacher. In the employment area, employees can be more productive on the job when they use assistive listening devices in staff meetings, for training, in noisy settings and one on one to interact with supervisors and coworkers, not to mention in the interviewing process.

#### **NEED FOR AN INTERFERENCE-FREE BANDWIDTH**

There are three basic types of assistive listening device technology: audio loop, infrared and FM. However, in many cases

because of acoustics, practical use considerations, and esthetics the use of audio loop and infrared is ruled out leaving FM as the only option. How are facilities to comply with the ADA mandate if the only available technology, FM radio, is subjected to interference?

There should be no question that assistive listening devices are a necessary and helpful accommodation for people with hearing loss, both those who use hearing aids and those who do not. But as more and more systems are being installed, more complaints are being received about their poor performance. Admittedly, some of the complaints can be attributed to poor quality of equipment and installation or poor maintenance - preliminary research is just being done to develop standards for the manufacture and installation of assistive listening devices, as no standards exist today.

However, many complaints are traced to interference from high power electronic devices such as pagers, emergency dispatch vehicles and cellular phones, to name a few. It is emerging that some of the backlog of cases of ADA-related lawsuits at the Department of Justice may find interference to be at the root of the problem. SHHH was involved in a consulting capacity in a Department of Justice mediation proceeding where a patron was suing a theater for not providing an assistive listening device that worked. Technically the theater had complied with the ADA by

installing an FM system many years earlier but it was not usable. Both the patron and the theater management assumed it was the result of a faulty system when in fact it turned out to be a situation caused by interference in the area by high powered electronic devices. This interference led to time consuming mediation, not to mention lack of access and the ill will towards the theater and the manufacturer of the assistive listening device and the frustration of the theater patron.

So although we know that assistive listening devices provide communication access for people with hearing loss, they can only be used successfully if they are allowed to operate within an interference free bandwidth.

#### **ISSUES RELATED TO SHARING OF 216-217MHz BAND**

In Docket No. 97-153 at 25 the Commission notes, "the nature of telemetry communications needs could change over time with telemetry and LPRS transmitters operating in close proximity". SHHH believes "could" might more accurately be expressed as "will".

Whereas telemetry applications typically have been in rural and low population areas, that is changing. One instance where telemetry is moving out of the backwoods and into our neighborhoods is in the metering of electric and gas consumption. Pennsylvania and some other states are on the leading edge of a movement toward energy utility deregulation. Instead of being limited to a

regulated monopoly source, consumers will have an opportunity to purchase gas and electricity from a number of competitive sources. Telemetry is being used to meter the energy used and is being installed on neighborhood streets.

In response to the Commission's question, "are new uses of telemetry expected in the near future which would likely place telemetry transmitters near schools, hospitals, or other areas where LPRS devices are most likely to be used?" SHHH believes the answer is an emphatic, Yes!

The Commission accurately notes, "an increased use of the 216-217 MHz band for telemetry communications near schools or hospitals could result in harmful interference to auditory assistance devices and radio-based health care devices."

Even the possibility of increased use of the 216-217MHz band for telemetry will discourage schools and other facilities from investing in auditory assistive devices in the 216 MHz band. So many schools have been battling the interference problems with their systems in the 72-76MHz band that they would need absolute assurance that 216-217MHz will be guaranteed interference free before they will invest in any new systems. Likewise, manufacturers of assistive listening equipment will not develop products for use in the 216-217MHz band unless they are confident potential clients can be assured of interference-free operation.



SHHH understood it was the FCC's intent to restrict 216 - 217MHz to very low power devices. It was on that understanding that we submitted comments in support of WT Docket No. 95.96, RM-7784 on July 18, 1995. At that time however, we raised a concern that with the proposed shared-use of the 216-217MHz band there was no way to predict what explosions of technology might occur and lead to unexpected interference sources in the future. It appears that with the expanded use of telemetry that time has come, much earlier than we were anticipating.

#### **POSSIBLE SOLUTIONS**

The Commission asks: "What measures, if any, should the we consider in order to ensure the effective use of the 216-217MHz band on a shared basis for both telemetry and LPRS devices?"

1. Our first choice would be for assistive listening devices to have exclusive use of the 216-217MHz band. We do not make this request lightly.

Given the need for assistive listening devices, as already documented above, and given the nightmare experienced with interference in the 72-76MHz band nationwide, we believe that this would be the only safe solution. Indeed any solution that does not take a long-term view, does not allow for emerging and unknown technological developments and, given what we know today, does not take into consideration the expanded use of telemetry in

neighborhoods, could be considered irresponsible action towards the access needs of people who are hard of hearing.

2. If our request for exclusive use of the band is out of the question, there is another option. However it is much less satisfactory from the perspective of hard of hearing consumers. It would be to keep all transmitters in the 216-217MHz band subject to identical power limits, no greater than present LPRS power i.e. less than one watt.

3. Restrict new Section 90.259 licenses to transmissions at frequencies above 217MHz.

4. Existing Part 90 licensees operating between 216-217MHz be "grandfathered" only for expected life of presently installed equipment.

5. No "priority" status to be given for Part 90 (licensed) transmitters over Part 15 (unlicensed) transmitters in the 216-217MHz band. All users to have equal standing.

The Commission needs to clarify the relationship of Part 90 (licensed) transmitters to Part 15 (unlicensed) transmitters. In its July 18, 1995 comments, SHHH requested that low power assistive listening transmitters, with output power no greater than 10 milliwatts, be authorized to operate without a license and without

restriction to a particular system service area.

The reason behind this request was that many individuals who are hard of hearing purchase their own personal FM systems for use at home or when they are travelling. A licensing requirement would create additional hurdles for these individuals to overcome, both bureaucratic and economic. In addition, individuals with hearing loss often need a lot of encouragement before they will seek help for their hearing problems. A licensing requirement might discourage them from seeking a very effective solution.

However, being Part 15 transmitters puts assistive listening device users at a disadvantage with no standing to complain about interference and no priority usage within the bandwidth, a situation that Fairfield Industries, Inc., in their reply comments of October 17, 1997, flaunts blatantly.

We therefore request clarification of Part 15 transmitters' status and urge strongly that there be no "priority" status for Part 90 transmitters over Part 15 transmitters in the 216-217MHz band. All users should have equal standing.

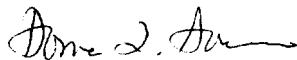
#### **CONCLUSION**

The threat of interference to assistive listening devices being used in the 216-217MHz band is serious, but with decisive action the FCC can prevent a repeat of the debacle experienced in

the 72-76MHz band.

It is vital that a way be found to ensure interference-free usage of assistive listening devices for the benefit of the millions of Americans with hearing loss who rely on them and for the parties mandated by the ADA to provide them.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Donna Sorkin".

Donna Sorkin, Executive Director  
SHHH  
7910 Woodmont Avenue, Suite 1200  
Bethesda, Maryland 20814

November 17, 1997